

# Plunge Uino: effective and affordable plunge freezing for cryo-EM

## The Problem

- Cryogenic electron microscopy (cryo-EM) is fast becoming best practice for protein sample preparation to drive innovation in medical biology and drug design.
- Current cryo-EM sample preparation devices are slow, expensive, and only produce good samples up to 50% of the time.
- With tighter budgets and increasing demand for high quality data to design novel drugs, cryo-EM facilities need solutions that produce faster, affordable, quality protein samples.

## The Solution

- Plunge Uino is a next-generation plunge-freezer device coupled with precision engineered consumables that are backwards compatible with other commercial instruments.
- Our proprietary technology enables accessible, high performance cryo-EM for labs: an easy to use, cost-effective, portable device that prepares high-quality samples 10x faster.

## Our Program

- Team with 40+ years cryo-EM experience and demonstrated success in protein science, drug design, and precision robotics.
- Next steps: Independent testing of beta prototype with early adopters underway. Currently working on comprehensive data package and provisional patent application

Looking to **licence technology** to an existing cryo-EM instrumentation company or create spinout for future acquisition



## Sample preparation for the modern lab

### PLUNGE-UINO

#### Next-generation plunge-freezer device

- ✓ Consistent
- ✓ Efficient
- ✓ Easy

### TI-X

#### Precision engineered consumables

- ✓ High performance
- ✓ Backed by latest in materials science

## Our Team

A/Prof Shabih Shakeel, Structural Biology

A/Prof Andrew Leis, Cryo-EM

Mihin Perera, Cryo-EM and Biomedical Engineering

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